UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,493	10/03/2003	Zhi-Chun Honkasalo	60282-00096	4562

32294 7590 09/22/2008
SQUIRE, SANDERS & DEMPSEY L.L.P.
8000 TOWERS CRESCENT DRIVE
14TH FLOOR
VIENNA, VA 22182-6212

EXAMINER	
MUI, GARY	
ART UNIT	**PAPER NUMBER**
2616	
MAIL DATE	**DELIVERY MODE**
09/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/677,493	**Applicant(s)** HONKASALO ET AL.	
	Examiner GARY MUI	**Art Unit** 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2008*.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-66* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-66* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant is given ONE MONTH or THIRTY DAYS, whichever is longer, from the mailing date of this communication to correct the deficiency(ies). THE PROVISIONS OF 37 CFR 1.136 DO NOT APPLY TO THE TIME SPECIFIED IN THIS ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 5 – 14, 16, 19, 23 – 32, 34, 37 – 47, 49, 52, and 56 – 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Widegren et al. (US 2002/0036983 A1; hereinafter "Widegren").

For claims 1, 19, 37, and 52, Widegren teaches initializing a communication connection and sending a communication connection request signaling for at least one service type to be used in the communication connection from a first network element to a third network element, requesting, by the third network element, an authorization for connection parameters from a fourth network element, deciding, in the fourth network element, on the connection parameters to be authorized for the communication connection and on service types which can be provided for the communication connection, and sending a decision message from the fourth network element to the third network element, wherein the decision message comprises at least one of the authorization for the connection parameters, service types usable for the communication connection, and an information portion indicating, for at least one service, whether or not the fourth network element controls a further authorization regarding at least one of the indicated service types in the communication connection (see paragraph 0097 and figure 20, for a connection between user equipments the data flow is controlled through a Policy Control Function (PCF) in the policy server; the GGSN interrogates the PCF to initialize a gate using the policy control filtering data at the GGSN).

For claims 5, 23, 39 and 56, Widegren teaches connecting a mobile communication network with a user equipment comprising at least one of the first network element and a second network element connected (see paragraph 0097, user equipment).

For claims 6, 24, 40, and 57, Widegren teaches the initializing step comprises initializing the communication connection and sending the communication connection request from the first network element to the third network element comprising a communication control or gateway network element of the communication network of a mobile communication network, wherein the communication control or gateway network element is configured to trigger a dynamic policy request (see paragraph 0097 and figure 20).

For claims 7, 25, 41, and 58, Widegren teaches the requesting step comprises requesting the authorization from the fourth network element comprising a policy control network function, which is capable of performing the deciding step based on at least one of a user subscription profile and application service information (see paragraph 0097 and 0098).

For claims 8, 26, 42, and 59, Widegren teaches the requesting step comprises requesting the fourth network element being a separate network element or included in the third network element (see paragraph 0097).

For claims 9, 27, 43, and 60, Widegren teaches the requesting step comprises requesting the authorization for the connection parameters comprising a quality of service level to be provided for the communication connection (see paragraph 0097, QoS parameters).

For claims 10, 28, 44, and 61, Widegren teaches the deciding step comprises deciding on the service types defined based on at least one of a service access point a service packet classifier and aggregate level parameters pertaining to the communication connection based on the initialized connection parameter request signaling (see paragraph 0101, packet classifier).

For claims 11, 29, 45, and 62, Widegren teaches the sending step comprises sending the decision message or messages comprising charging information for the communication connection using at least one service type (see paragraph 0093).

For claims 12, 30, 46, and 63, Widegren teaches the deciding step comprises deciding on the service types including at least one of real-time services and non real-time services (see paragraph 0097).

For claims 13, 31, 47, and 64, Widegren teaches the sending step comprises sending, in the decision message, aggregate connection parameters to the third network element as a part of a set of parameters (see paragraph 0097).

For claims 14, 32, and 65, Widegren teaches the requesting step comprises requesting the authorization from the fourth network element, in a case where session-based services are authorized by the fourth network element, being configured to receive information about flows included in a session and information pertaining to a commencement and termination of sessions (see paragraph 0097 and figure 20).

For claims 16, 34, 49, and 66, Widegren teaches locating the first network element and a second network elements in different communication networks or in a same communication network (see paragraph 0097 and figure 20).

For claim 38, Widegren receive from the third network element a further request for an authorization of connection parameters for service types of the communication connection flows of which are to be controlled by the device, to decide on the connection parameters to be authorized for a service type in question, and to generate and send a further decision message to the third network element wherein the further decision message comprises the authorization for the connection parameters of the service type in question (see paragraph 0097; the GGSN receives authorization for the service type from the PCF).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2 – 4, 15, 17, 18, 20 – 22, 33, 35, 36, 48, 50, 51, and 53 – 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widegren in view of Mochizuki et al. (US 7,024,487 B2; hereinafter “Mochizuki”).

For claims 2, 20, and 53, Widegren teaches all of the claimed subject matter with the exception of processing, in the third network element, the decision message for enforcing a decision of the fourth network element in the communication connection and determining, based on the information portion, types of communication connection flows of which can be admitted by the third network element without consulting the fourth network element, and types of communication connection flows which are to be controlled by the fourth network element. Mochizuki form the same field of endeavor teaches each of the entries in the network control information database includes a user name (user ID), a service term, a service area, a service ID assigned to each contracted communication service, first path definition, second path definition, QOS, the necessity of a backup route, and a source address and a destination address to be added to transmission packets. The first path definition includes a service provider identifier, a bandwidth, and a path ID, and the second path definition includes a service provider identifier, a bandwidth, and a path ID. When the communication service requested by the user is granted by a combination of two communication paths, the two communication paths are defined by the first path definition and the second path definition. When the requested communication service is satisfied with a single communication path, no data is entered in the second path definition (see column 7 lines 30 – 48; data can flow through a first path or a second path where one element controls one flow and the other controls the other).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to separate the flows as taught by Mochizuki into Widegren policy influenced application. The motivation for doing this is by is reduce this is increase the overall speed of the system when it does not have to communicate with another element.

For claims 17, 35, and 50, Widegren teaches all of the claimed subject matter with the exception of a step of setting a default value for the connection parameters for services in the communication connection which are not controlled by the fourth network element. Mochizuki form the same field of endeavor teaches each of the entries in the network control information database includes a user name (user ID), a service term, a service area, a service ID assigned to each contracted communication service, first path definition, second path definition, QOS, the necessity of a backup route, and a source address and a destination address to be added to transmission packets. The first path definition includes a service provider identifier, a bandwidth, and a path ID, and the second path definition includes a service provider identifier, a bandwidth, and a path ID. When the communication service requested by the user is granted by a combination of two communication paths, the two communication paths are defined by the first path definition and the second path definition. When the requested communication service is satisfied with a single communication path, no data is entered in the second path definition (see column 7 lines 30 – 48; data can flow through a first path or a second path where one element controls one flow and the other controls the other; the two paths are defined by there path definitions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to separate the flows as taught by Mochizuki into Widegren policy influenced application. The motivation for doing this is by is reduce this is increase the overall speed of the system when it does not have to communicate with another element.

For claims 3, 21, and 54, Widegren teaches all of the claimed subject matter with the exception of requesting, when the third network element receives a flow of the types of communication connections which are indicated to be controlled by the fourth network element, connection parameters for the types of communication connection flows from the fourth network element, deciding, in the fourth network element, on the connection parameters to be authorized for the types of communication flows in question based upon the requesting step, and sending a further decision message from the fourth network element to the third network element wherein the further decision message comprises the authorization for the connection parameters of the types of communication connection flows in question. Mochizuki form the same field of endeavor teaches each of the entries in the network control information database includes a user name (user ID), a service term, a service area, a service ID assigned to each contracted communication service, first path definition, second path definition, QOS, the necessity of a backup route, and a source address and a destination address to be added to transmission packets. The first path definition includes a service provider identifier, a bandwidth, and a path ID, and the second path definition includes a service provider identifier, a bandwidth, and a path ID. When the communication service requested by the user is granted by a combination of two communication paths, the two communication paths are defined by the first path definition and the second path definition. When the requested communication service is satisfied with a single communication path, no data is entered in the second path definition (see column 7 lines 30 – 48; data can flow through a first path or a second path where one element controls one flow and the other controls the other; the two paths are defined by there path definitions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to separate the flows as taught by Mochizuki into Widegren policy influenced application. The motivation for doing this is by is reduce this is increase the overall speed of the system when it does not have to communicate with another element.

For claims 4, 22, and 55, Widegren teaches admitting, when the third network element receives a flow of the types of communication connections which are indicated to be controlled by the third network element, the flow by the third network element and using provisioned connection parameters for the types of communication connection flows controlled by the third network element (see paragraph 0097, the gate is set to filter the data flow).

For claims 15, 33, and 48, Widegren teaches all of the claimed subject matter with the exception of the requesting step comprises using, when the third network element receives the types of communication connection flows which are indicated to be controlled by the fourth network element, at least one of an authorization token and a flow identification as a binding information. Mochizuki form the same field of endeavor teaches each of the entries in the network control information database includes a user name (user ID), a service term, a service area, a service ID assigned to each contracted communication service, first path definition, second path definition, QOS, the necessity of a backup route, and a source address and a destination address to be added to transmission packets. The first path definition includes a service provider identifier, a bandwidth, and a path ID, and the second path definition includes a service provider identifier, a bandwidth, and a path ID. When the communication service requested by the user is granted by a combination of two communication paths, the two communication paths are defined by the first path definition and the second path definition. When the requested communication service is satisfied with a single communication path, no data is entered in the second path definition (see column 7 lines 30 – 48; data can flow through a first path or a second path where one element controls one flow and the other controls the other; the two paths are defined by there path definitions).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to separate the flows as taught by Mochizuki into Widegren policy influenced application. The motivation for doing this is by is reduce this is increase the overall speed of the system when it does not have to communicate with another element.

For claims 18, 36, and 51, Widegren teaches the setting set comprises setting a default value for connection parameters per service (see paragraph 0097, the initialization parameters for the gate).

Response to Arguments

7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., multiple service flows are aggregated in one communication connection, and the further authorization is for one of services in the communication connection (see page 27 of the remarks)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. Applicant's arguments filed February 20, 2008 have been fully considered but they are not persuasive.

In response to the applicants entire remarks, in particular that the Widegren reference fails to teach "the decision message comprises an information portion that indicates, for each server, whether or not the fourth element controls a further authorization regarding at least one of the service types in the communication connection". The examiner respectfully disagrees. In the Widegren reference the PCF may apply rules that restrict the use of specific access bearers dependent on network factors, such as the involvement of the Local SIP Proxy Server. Since the PCF is informed that the Local SIP Proxy Server is in use for this connection, the use of this bearer type is approved. The authority to establish the access bearer is independent from the authority to transmit data into the telephone network. Once the bearer is established, a “gate" is established at the GGSN that controls what data is permitted to enter the telephony network. This gate performs classification and policing of the data, similar to the DS edge functionality. The gate is controlled by data received from the application through the PCF (see paragraphs 0128 and 0129). The message from the PCF about its policy will be controlling the information coming through the gate. The PCF will be deciding what will be or will not come though the gate with the policy information sent from the PCF. Therefore, independent claims 1, 19, 37, and 52 are rejectable under Widegren.

Claims 5 – 14, 16, 23 – 32, 34, 38 – 47, 49, and 56 - 56 which depends on either claims 1, 19, 37, or 52 are rejected under Widegren as based on the reasons above.

Claims 2 – 4, 15, 17, 18, 20 – 22, 33, 35, 36, 49, 50, 51, and 53 – 55 which depends on either claims 1, 19, 37, or 52 and based on the reasons above the Widegren cures the deficiencies of the Mochizuki reference and therefore the claims are rejectable under Widegren in view of Mochizuki.

Conclusion

9. **Examiner's Note**: Examiner has cited particular paragraphs or columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and

figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to GARY MUI whose telephone number is (571)270-1420. The examiner can normally be reached on Mon. - Thurs. 9 - 3 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2616

/Gary Mui/
Examiner, Art Unit 2616
05/01/2008